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EXAMINER

TRAN, SUSAN T

ART UNIT PAPER NUMBER

1615

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/086,727	<b>Applicant(s)</b> LEVI ET AL.	
	<b>Examiner</b> Susan T. Tran	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-7,10-13,19-23,25,26 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,10-13,19-23,25,26 and 28-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt is acknowledged of applicant's Amendment filed 12/29/04, and Power of Attorney filed 02/10/05.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 5-7, 10-13, 19, 21-23, 25, 26 and 28-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. It appears that applicant's specification does not provide support for the following limitations:

Claim 1, the limitation "a molecular weight which is sufficiently low so as to not prevent biological degradation thereof". Applicant's specification while discloses water soluble polymers of the claimed invention are biologically degradable, does not explicitly provide guidance that the polymers have a molecular weight which is sufficiently low so as to not prevent biological degradation. Secondly, to exclude something positively, applicants would have to recite it positively in the specification.

Claim 2, the limitation "applied as a film to animal excrement of a pet or livestock". Applicant's specification at page 4 discloses the composition may be applied

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to excrement in liquid form or in the form of a spray, and upon drying, the sprayed compositions form a thin film. However, nowhere in the specification provides support that the composition is applied as a film to the excrement.

Claims 21 and 23, the limitation "polymer is a low molecular weight polymer". Applicant's specification at page 3 discloses water-soluble polymers are polymers having molecular weight higher than 15,000, which includes an indefinite number of an upper limit. Accordingly, specification does not provide support for the limitation "low molecular weight polymer".

Claim 23, the limitation "reduce excrement pH to 4.6 or less". One of applicants' examples shows a pH of excrement was reduced to 4.5, however, nowhere in the specification provides specific guidance of an indefinite lower limit pH level of less than 4.6.

Claim 29, the limitation "approximately 1.5% to approximately 2.5%". Applicant's examples show polymer in an amount of 1.5% or 2.5%, however, nowhere in the specification provides specific guidance for any concentrations between 1.5 and 2.5, as well as *approximately* 1.5%, which could includes 1%.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-7, 11, 19-20, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. US 4,909,986.

Kobayashi teaches aqueous deodorant composition comprising water-soluble polymer having molecular weight higher than 15,000, perfumes, citric acid, and other additives (columns 1-2, and column 7, lines 56-620). The water-soluble polymer can be selected from nonionic, anionic, cationic, or amphoteric, including polyacrylic acid or polyacrylamide (columns 5-7, and examples). The aqueous deodorant composition can be applied by spraying onto liquid or solid selected from cattle raising farm, chicken farm, and livestock product, which has malodor and/or gives off malodors (column 12, lines 6-28).

The examiner notes the use of the transitional phrase "consisting essentially of" in claim 1. However, since the prior art composition has the same basic and novel characteristic (aqueous deodorant to remove malodors from animal farm), it is an applicant's burden to establish that other additives in the prior art composition are excluded from the claim by "consisting essentially of" language. See, e.g., PPG, 156 F.3d at 1355, 48 USPQ at 1355. Furthermore, even when an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See also *Ex parte Hoffman*, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Inter. 1989).

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It is noted that the reference does not teach that the composition facilitating easy handling of said deodorized excrement recites in claim 21, however, the intended use of the claimed composition does not patentably distinguish the composition, per se, since such undisclosed use is inherent in the reference composition. In order to be limiting, the intended use must create a structural difference between the claimed composition and the prior art composition. In the instant case, the intended use does not create a structural difference, thus the intended use is not limiting. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963).

Claims 1, 2, 5-7, 10, 11, 19-23, 25, 26 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. US 4,909,986, in view of Suzuki US 5,004,600.

Kobayashi is relied upon for the reason stated above. Kobayashi does not expressly teach the amount of the water-soluble polymer.

Suzuki teaches an aqueous composition comprising deodorizing agents comprising water-soluble polymer, including cellulose and polyvinyl alcohol (column 2, lines 5-10). The composition is useful for the treatment of air or other gases for the removal of odors (column 1, lines 67 through column 2, line 1). The amount of the water-soluble polymer is from about 35 to about 65 parts by weight, or more preferably about 20 part by weight (column 2, lines 1-4, and table 1). Thus, it would have been obvious for one of ordinary skill in the art to modify the aqueous deodorizing

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composition of Kobayashi using the water-soluble and the amounts of water-soluble polymer in view of the teaching of Suzuki with the expectation of providing an aqueous deodorizing composition suitable to remove malodor in the environment.

It is noted that the cited references do not teach the pH of about 1.5. However, it is also noted that Kobayashi uses the claimed amount of the same acidic agent, namely, citric acid (column 7, lines 56-60, and examples) to obtain an aqueous deodorizing composition suitable to remove malodor in cattle raising farm, chicken farm, or livestock product. Kobayashi also shows in example 56 shows the use of citric acid to adjust the pH of the composition. Furthermore, the examiner is unable to recognize the unexpected and/or unusual results in the particular pH value over the aqueous deodorant composition of Kobayashi. Accordingly, it is the position of the examiner that it would have been obvious for one of ordinary skill in the art to, by routine experimentation determine suitable pH level of the composition with the expectation of at least similar result.

Claims 11-13 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al., and Shimizu US 4,839,089.

Kobayashi is relied upon for the reasons stated above. The reference is silent as to the specific perfume, such as limonene.

Shimizu teaches deodorant composition comprising perfume selected from alpha-pinene, terpenoid, and limonene (column 6, lines 34-36). Thus, it would have been *prima facie* obvious for one of ordinary skill in the art to prepare Kobayashi's

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deodorant composition using limonene as perfume in view of the teaching of Shimizu, because the references teach the use of perfume to reduce malodors. The expected result would be an aqueous deodorant composition that exhibits a deodorizing effect on liquids and solids, which give off odors.

### ***Response to Arguments***

Applicant's arguments filed 12/29/04 have been fully considered but they are not persuasive.

Applicant argues that none of applicant's polymers as specified in any of claims 21, 22 or 23 conform to the Kobayashi requirements. However, claims 21-23 are not rejected over Kobayashi.

Applicant argues that Kobayashi teaches using only a very small quantity of water-soluble polymer (applicant refers to column 9, lines 49+). Accordingly, the small quantity of polymer required by Kobayashi is far less than what is the minimum necessary according to the present invention. Thus, there is no motivation for one skilled in the art to increase the quantity of polymer by 1000 times. In response to applicant's argument, it is noted that Kobayashi teaches the amount of polymer ranges from 0.05 to 50 ppm as ***solids in the aqueous medium*** (see column 9, lines 49-51). Kobayashi in the examples disclose an aqueous solution of polymer in the range of from 1000 ppm (0.1%) (see column 22, and examples 54 and 55). Broad limitation "at least 0.1% of at least one polymer" in the instant claims allows the interpretation of 0.1% of polymer in aqueous solution. The claims do not require the claimed amount of polymer



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as solid in the aqueous medium. In any event, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Applicant has not showed any criticality in the claimed concentration, instead, applicant argues that the claimed amount is critical to form a film wrapping the excrement, while Kobayashi concerns water soluble polymers for flocculation. However, although Kobayashi does not explicitly teach the composition capable of forming a film on the excrement, there is no criticality, as well as unexpected and/or unusual results being seen, because Kobayashi teaches aqueous deodorant composition using similar water-soluble polymer such as amphoteric, including polyacrylic acid or polyacrylamide (columns 5-7, and examples). The aqueous deodorant composition can be applied by spraying onto liquid or solid selected from cattle raising farm, chicken farm, and livestock product, which has malodor and/or gives off malodors (column 12, lines 6-28). Applicant's attention is called to column 11, lines 4-6, lines 38-44, Kobayashi discloses the deodorant has a higher deodorizing effect than known deodorants.

Applicant argues that Kobayashi does not teach the water-soluble having low molecular weight. However, applicant has not established criticality in the low molecular weight polymer. Especially when Kobayashi teaches the use of similar polymer, such as polyacrylic acid or polyacrylamide polymer. Applicant's specification discloses polymers having molecular weight of higher than 15,000 permits an indefinite number of

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upper limit molecular weight including the polymer taught by Kobayashi. Accordingly, the 103(a) rejection over Kobayashi is maintained.

Applicant argues that the proposed combination of Kobayashi and Suzuki would not have been obvious because using the Suzuki polymers would violate the requirement of Kobayashi, and using a greater quantity than the maximum of 50 ppm permitted by Kobayashi would also violate Kobayashi's requirement. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, Suzuki teaches an aqueous composition comprising deodorizing agents comprising water soluble polymer, including cellulose and polyvinyl alcohol (column 2, lines 5-10). The composition is useful for the same purpose as Kobayashi's requirement, e.g. for the treatment of air or other gases for the removal of odors (column 1, lines 67 through

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column 2, line 1). The amount of the water-soluble polymer is from about 35 to about 65 parts by weight, or more preferably about 20 part by weight (column 2, lines 1-4, and table 1). Therefore, it would have been obvious for one skilled in the art to, by routine experimentation determine/modify suitable polymer and suitable amount of polymer to obtain the same results.

Applicant argues that Shimizu has not been cited to make up for the deficiencies of Kobayashi, and indeed does not do so. Therefore, even if the proposed combination were obvious, it would have reach any of applicants' claims. In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicant argues that Dodd is far cry from the present invention. it discloses an aqueous composition adapted for use on the skin and hair. Applicant uses transitional phrase "consisting essentially of" to exclude any meaningful quantity of the essential uncomplexed cyclodextrin of Dodd. The 103(a) rejection over Dodd et al. has been withdrawn.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

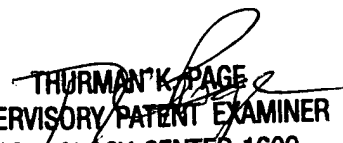
### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-R from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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